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of 37 C.F.R. § 1.121, a marked up version showing the changes to the claims, is attached herewith as Appendix A. For the Examiner's convenience, a complete claim set of the currently pending claims is also submitted herewith as Appendix B.

### REMARKS

#### Status of the Claims.

Claims 1-59, 94-151, and 232-241 are pending with entry of this amendment, claims 60-93, 152-231, and 242-243 being cancelled and no claims being added herein. Claims 1, 94, and 116 are amended herein. These amendments introduce no new matter. Support is replete throughout the specification (see, *e.g.* Figure 34).

If a telephone conference would expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (510) 337-7871.

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Respectfully submitted,

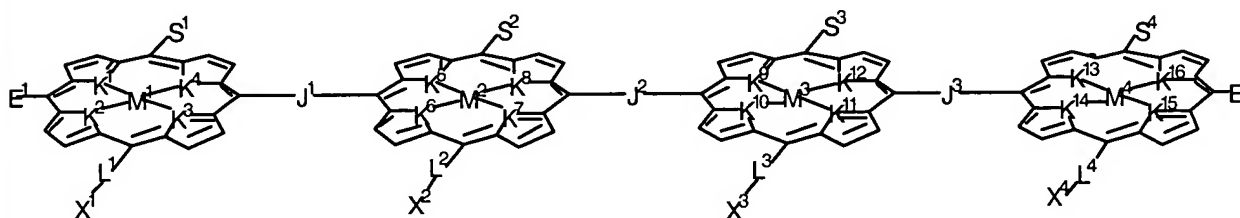


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APPENDIX AVERSION WITH MARKINGS TO SHOW CHANGES MADE IN PCT/US00/17847 WITH  
ENTRY OF THIS AMENDMENTIn the claims:

1. An apparatus for storing data, said apparatus comprising:  
a fixed electrode electrically coupled to  
a storage medium having a multiplicity of different and distinguishable oxidation states  
wherein data is stored in said oxidation states by the addition or withdrawal of one or more electrons  
from said storage medium via the electrically coupled electrode[.]; wherein said storage medium  
comprises a molecule attached to said electrode through a linker selected from the group  
consisting of the linker component of molecules "A" through "I" of figure 34.

94. A molecule for the storage of information, said molecule having the formula:



wherein

$S^1$ ,  $S^2$ ,  $S^3$ , and  $S^4$  are substituents independently selected from the group consisting of aryl, phenyl, cycloalkyl, alkyl, halogen, alkoxy, alkylthio, perfluoroalkyl, perfluoroaryl, pyridyl, cyano, thiocyanato, nitro, amino, alkylamino, acyl, sulfoxyl, sulfonyl, imido, amido, and carbamoyl wherein said substituents provide a redox potential range of less than about 2 volts;

$M^1$ ,  $M^2$ ,  $M^3$ , and  $M^4$  are independently selected metals;

$K^1$ ,  $K^2$ ,  $K^3$ ,  $K^4$ ,  $K^5$ ,  $K^6$ ,  $K^7$ ,  $K^8$ ,  $K^9$ ,  $K^{10}$ ,  $K^{11}$ ,  $K^{12}$ ,  $K^{13}$ ,  $K^{14}$ ,  $K^{15}$ , and  $K^{16}$  are independently selected from the group consisting of N, O, S, Se, Te, and CH;

$J^1$ ,  $J^2$ , and  $J^3$  are independently selected linkers;

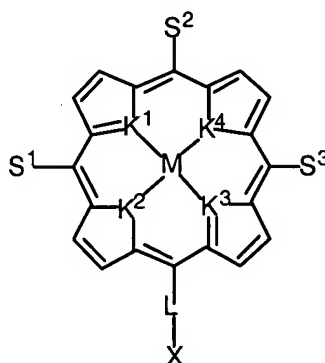
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$L^1$ ,  $L^2$ ,  $L^3$ , and  $L^4$  are present or absent and, when present are independently selected linkers at least one of which is selected from the group consisting of the linker component of molecules "A" through "I" of figure 34;

and  $X^1$ ,  $X^2$ ,  $X^3$ , and  $X^4$  are independently selected from the group consisting of a substrate, a reactive site that can covalently couple to a substrate, and a reactive site that can ionically couple to a substrate;

and  $E^1$  and  $E^2$  are terminating substituents; and  
said molecule has at least two different and distinguishable oxidation states.

116. An apparatus for storing data, said apparatus comprising:  
a fixed electrode electrically coupled to a storage medium comprising a storage molecule having the formula:



wherein

$K^1$ ,  $K^2$ ,  $K^3$ , and  $K^4$  are independently selected from the group consisting of N, O, S, Se, Te, and CH;

M is a metal or (H,H);

$S^1$ ,  $S^2$ , and  $S^3$  are independently selected from the group consisting of aryl, phenyl, cycloalkyl, alkyl, alkoxy, halogen, alkylthio, alkoxy, perfluoroalkyl, perfluoroaryl, pyridyl, nitrile, nitro, amino, and alkylamino;

L is present or absent and, when present, is a linker selected from the group consisting of the linker component of molecules "A" through "I" of figure 34; and

X is a substrate or a reactive site that can covalently or ionically couple to a substrate.